

Claims

1. A support cradle (8) for a computed tomography system (1), having a supporting ring (10) for rotatably supporting a rotating body (2),
characterized in that the supporting ring (10) is embodied as a hollow section, in which two annularly closed hollow chambers (31a, 31b) fluidically separated from one another are embodied, of which a first hollow chamber (31a) forms an annular conduit (32) for supplying a coolant (L) to the rotating body (2), and a second hollow chamber (31b) forms an annular conduit (33) for evacuating the coolant (L) from the rotating body (2).
2. The support cradle (8) as defined by claim 1,
characterized in that the support cradle (8) includes a pedestal (9), on which the supporting ring (10) is supported rotatably about a horizontal transverse axis (17).
3. The support cradle (8) as defined by claim 2,
characterized in that a base plate (11) of the pedestal (9) is embodied as a hollow section.
4. The support cradle (8) as defined by claim 3,
characterized in that two transverse conduits (27, 28), extending in the transverse direction (12) and fluidically separated from one another, are embodied in the base plate (11).
5. The support cradle (8) as defined by one of claims 1 through 4,
characterized in that the supporting ring (10) has a substantially L-shaped profile, and one of the annular conduits (32, 33) is embodied in each arm (29, 30) of the L-shaped profile.
6. The support cradle (8) as defined by one of claims 1 through 5,

characterized in that the supporting ring (10) is supported with two aligned shaft segments (15a, 15b), secured to the circumference of the supporting ring (10), to the pedestal (9), and at least one shaft segment (15a, 15b) is embodied as a hollow section and communicates, for supplying or evacuating the coolant (L), with a corresponding annular conduit (32, 33) of the supporting ring (10).

7. The support cradle (8) as defined by one of claims 1 through 6, characterized in that along the course of each annular conduit (32, 33), a number of openings (35, 38) are made in an inner wall (36) of the supporting ring (10).

8. The support cradle (8) as defined by claim 7, characterized in that a first annular conduit (32) discharges axially with respect to the supporting ring (10) onto an adjacent outer side of the rotating body (2); and that a second annular conduit (33) discharges radially with respect to the supporting ring (10) onto a wall of the rotating body (2).

9. The support cradle (8) as defined by one of claims 1 through 8, characterized in that the coolant (L) is air.

10. A computed tomography system (1) having a blower and cooling unit (19), a supply line (20), and an evacuation line (24) for a cooling device (18) that includes coolant (L), and having a support cradle, at least partly receiving the supply line (20) and evacuation line (24) and rotatably supporting a rotating body (2), as defined by one of the foregoing claims.

11. The computed tomography system (1) as defined by claim 10, characterized in that the blower and cooling unit (19) is disposed on the base plate (11) and, for recirculating and cooling the coolant (L), is in fluidic communication with each transverse conduit (27, 28) of the base plate (11).

12. The computed tomography system (1) as defined by claim 10 or 11, characterized in that the annular conduit (32) of the supporting ring (10) intended for supplying the coolant (L) corresponds via the openings (35) with a supply line (22') of the rotating body (2); and that the annular conduit (33) of the supporting ring (10) intended for evacuating the coolant (L) corresponds via the openings (38) with a evacuation line (24') of the rotating body (2).